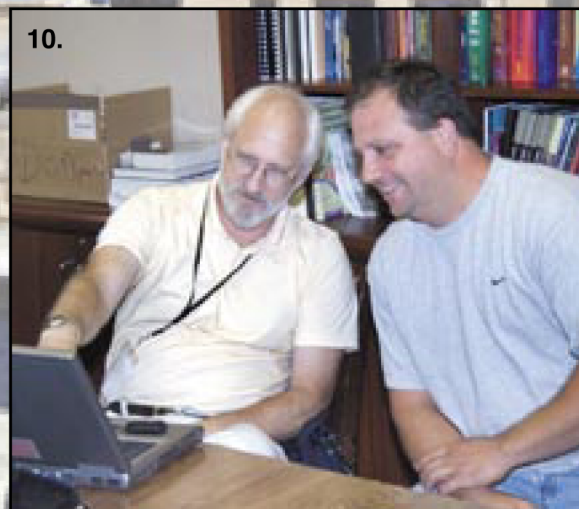
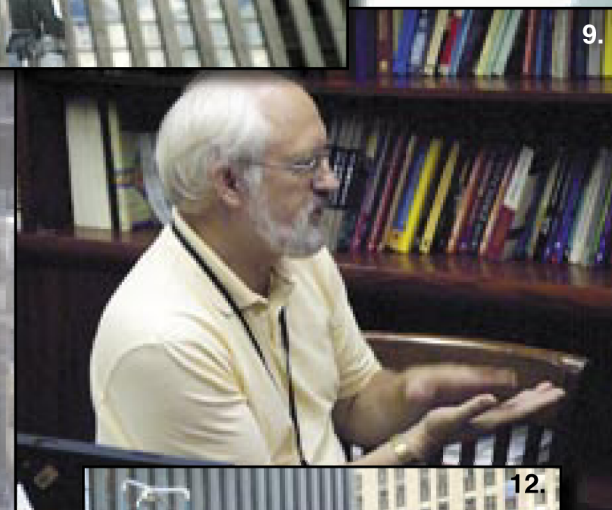
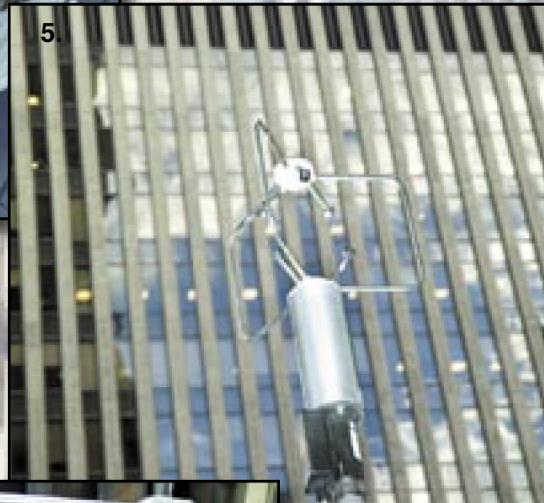


Researchers, Students Conduct Phase 2 of NYC Urban Dispersion Program

Photos by Roger Stoutenburgh

In August, staff from all three divisions of the Laboratory's Environmental Sciences Department (ES) took part in the second of three study phases of the New York City Urban Dispersion Program. On six separate days, tracer gases were released and tracked by an array of instruments to contribute data to computer models of air movement in urban areas in general and Manhattan in particular. The models will help first responders make prudent evacuation decisions in the event of an accidental or deliberate release of contaminants into the air.

— Kay Cordtz



(1.) Students and scientists gathered at The New Yorker Hotel in midtown Manhattan in the early morning to assemble tracer sampling equipment.

(2.) Monitoring equipment is transported to sidewalk stations located in a two-kilometer square area of the city.

(3.) Lou Gerlach, ES, places a Brookhaven Atmospheric Tracer Sampler (BATS) into a wire basket fastened to a lamp post. The BATS tracked the presence of the tracer gas during the morning's releases.

(4.) Princilla Francis, a New York City College of Technology student, monitors the release of perfluorocarbon tracer gas at one of the sidewalk stations.

(5.) Dozens of meteorological instruments were deployed

throughout the study area to track wind direction and speed.

(6.) Doniche Derrick, a senior at Medgar Evers College in Brooklyn studying environmental science, keeps an eye on the tracer and meteorological equipment at her sidewalk post.

(7.) Scott Smith, ES, and his student interns make sure their meteorological equipment is operating correctly.

(8.) Tom Watson, ES, confers with Bob Wieser and Ernie Lewis, both ES, pictured with the real-time tracer analysis system mounted in a van that cruised the perimeter of the study area.

(9.) Jerry Allwine of Pacific Northwest National Laboratory coordinated the efforts of many different agencies and labs.

(10.) Allwine conferred frequently about weather conditions with Victor Cassella, a member of BNL's meteorological team.

(11.) At the command center in an empty New York City high school, staff tracked the experiment's progress and conferred on public relations issues. Pictured are, left to right, Kirk Clawson from the National Oceanographic and Atmospheric Administration's Air Resources Laboratory, Allwine, Kay Cordtz from Community, Education, Government & Public Affairs, ES Department Chair Creighton Wirick and Paul Kalb, an ES division head who coordinated the BNL teams.

(12.) John Heiser who led the tracer team describes project details to a television news reporter.